Madison Mine
MODO 9863415
1.5

4-4-86

Attachment #5 - References

3.500 MADISON COUNTY - Anschutz Corporation (Water Pollution File)

3.500 MADISON COUNTY - Anschutz Corporation (Hazardous Waste File)

3.000 MADISON COUNTY - General File

2075810

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MO	

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Anschutz Mining Corp. Madison Mine	401 North Mine LaMotte

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Fredericktown	MO	63645	Madison		

09 COORDINATES LATITUDE	LONGITUDE
37 32 24.9	90 16 39.7

10 DIRECTIONS TO SITE (Starting from nearest public road)
Bus. 67N to Marvin Ave East. 1/4 mile from Fredericktown

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Anschutz Mining Corporation	2400 Anaconda Tower 555 17th St.

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Denver	CO	80202	(303) 298-1000

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
Same	

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)
☐ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☒ F. OTHER: Corporate (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: ___ / ___ / ___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___ / ___ / ___ (MONTH DAY YEAR) ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES DATE 2 / 25 / 86 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)	03 YEARS OF OPERATION	
☐ A. ACTIVE ☒ B. INACTIVE ☐ C. UNKNOWN	1845 (BEGINNING YEAR)	1984 (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Acids, Lead, PCB's, Cobalt

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Possible surface water contamination

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☒ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Greg Pavely	MO Dept. Nat. Res.	(314) 785-0832

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Greg Pavely	MDNR	PSRO	(314) 785-0832	4 / 4 / 86 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MO	

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [ ] A. SOLID
- [ ] B. POWDER, FINES
- [X] C. SLUDGE
- [ ] D. OTHER _____ (Specify)
- [ ] E. SLURRY
- [X] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE
(Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS Unknown
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- [X] A. TOXIC
- [X] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [ ] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [ ] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			amt. unknown
OLW	OILY WASTE			amt. unknown
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			amt. unknown
BAS	BASES			
MES	HEAVY METALS			amt. unknown

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SLU	Cobalt	7440-48-4	impoundment	unknown	
SLU	Lead	7439-92-1	impoundment	unknown	
ACD	Sulfuric acid	7664-93-9	impoundment	unknown	
MES	Lead	7439-92-1	impoundment	unknown	
MES	Cobalt	7440-48-4	impoundment	unknown	
OLW	PCB's	1336-36-3	impoundment	unknown	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS	N/A		FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

State Files

Site Visit

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MO | 02 SITE NUMBER:

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

Not Applicable

01 ☒ B. SURFACE WATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 3799
04 NARRATIVE DESCRIPTION

Pond Overflow runs into creek which runs through Fredevichtown

01 ☐ C. CONTAMINATION OF AIR
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NA

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NA

01 ☐ E. DIRECT CONTACT
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NA

01 ☐ F. CONTAMINATION OF SOIL
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres)
04 NARRATIVE DESCRIPTION

NA

01 ☐ G. DRINKING WATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NA

01 ☐ H. WORKER EXPOSURE/INJURY
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NA

01 ☐ I. POPULATION EXPOSURE/INJURY
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NA

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MO | 02 SITE NUMBER:

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Not Applicable

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include names of species)
NA

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
NA

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids, leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 3799
04 NARRATIVE DESCRIPTION
Pond has overflow ditch leading to creek

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
NA

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
NA

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION
Possible PCB's dumped

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 3799

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
State Files
Site Visit

SAFETY OUTLINE

(Use back of page to complete items)

(Attach pertinent documents)

Page ___ of ___

County: _____

Site/Location: _____

Date Prepared: _____ Date Used: _____

	Initials		Initials
1. Prepared by: _____	___	_____	___
for: _____	___	_____	___
_____	___	_____	___

2. Purpose of Activity and Procedures: _____

Safety plan is filed with Laboratory Services and was followed when sampling was done on 2/25/86

3. Material(s): _____

4. Possible Hazards: _____

5. Personnel Monitoring: _____

6. Site Monitoring: _____

7. Protective Level: A B C D

8. Protective Gear:

	Use	Expended		Use	Expended
steel toed rubber boots	☐	_____	full face respirator	☐	_____
gloves, _____	☐	_____	resp. cart. _____	☐	_____
gloves, _____	☐	_____	_____	☐	_____
suit, _____	☐	_____	_____	☐	_____
tape joints	☐	_____	_____	☐	_____
SCBA	☐	_____	_____	☐	_____

9. Decontamination Procedures: _____

10. Precautions, Site Control, Emergency Exit: _____

11. Hospital Location: _____ Ambulance #: _____

Police #: _____, Fire #: _____, Poison Control #: _____

Anschutz Mining
Madison Co.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
LABORATORY SERVICES PROGRAM

Preliminary Assessment/Site Investigation Report
Anschutz Mining Corporation
Fredericktown, Missouri
February 25, 1986

INTRODUCTION

The Anschutz Mining Corporation Site is a former mining site in Fredericktown, Missouri. The Poplar Bluff Regional Office has received reports of transformer oils being dumped at the site. This, along with an aerial surveillance conducted on November 20, 1985, which revealed the presence of two ponds containing a black liquid, resulted in the Waste Management Program requesting that sampling be performed.

On February 25, 1986, sampling was performed by Sam Brenneke and Bill Johnson of the Laboratory Services Program. Other Department of Natural Resources employees present at the time of sampling were Rick Roberts and Greg Pavely of the Poplar Bluff Regional Office and Joe Rowe of the Waste Management Program.

METHODS

Liquid samples were collected using a separate clean glass jar as a dipper for each sample. The liquid was placed in the appropriate containers and preserved on site. Soil and sediment samples were collected using a stainless steel spoon to place the soil or sediment into the appropriate container.

All samples were placed on ice to aid in preservation until analyses could be completed.

The cyanide analyses of soil samples were performed by Wilson Laboratories in Salina, Kansas with all other analyses being performed by the Department of Natural Resources Laboratory in Jefferson City, Missouri.

OBSERVATIONS

(See Appendix A for site map and sample locations).

The black ponds which were thought to be oil during the aerial surveillance contained only a black water. No oil was observed in either pond. pH measurements of the ponds were performed using pH paper and were determined to be in the range of 1.5-2.0. The dam between the ponds had been cut as well as the berm on pond #2 allowing both ponds to discharge to the site during heavy rains. There were no discharges at the time of sampling.

The small creek that leads off the Anschutz Mining Site was observed to be covered with a light blue-green sludge-like material.

RESULTS

The analytical results for the samples collected February 25, 1986, are attached as Appendix B.

Submitted by

Sam Brenneke
Environmental Emergency Specialist
Field Services Section
Laboratory Services Program

Date July 31, 1986

Approved by

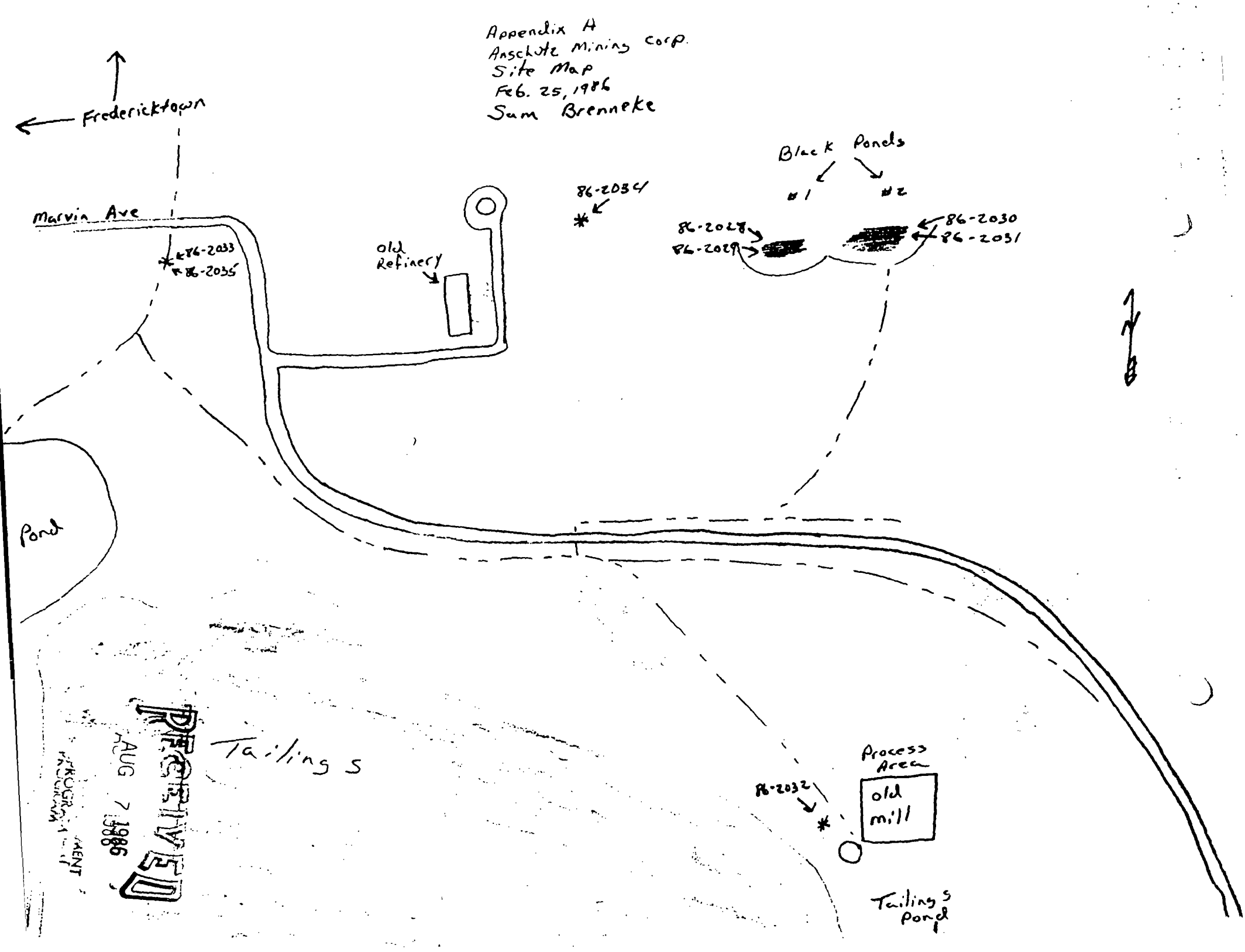
James H. Long
Director
Laboratory Services Program

cc: Burt McCullough, Waste Management Program
James Burris, Regional Administrator, Poplar Bluff Regional Office

APPENDIX A

SITE MAP AND SAMPLE LOCATIONS

Preliminary Assessment/Site Investigation Report
Anschutz Mining Corporation
Fredericktown, Missouri
February 25, 1986


Appendix A
Ansclute Mining Corp.
Site Map
Feb. 25, 1986
Sam Brenneke
Fredericktown
Marvin Ave
86-2033
86-2035
86-2034
Old Refinery
Black Ponds
#1
#2
86-2028
86-2029
86-2030
86-2031
Pond
Tailings
86-2032
Process Area
old mill
Tailings Pond
RECEIVED
AUG 7 1986
PROGRAM MANAGEMENT

APPENDIX B

ANALYTICAL RESULTS

Preliminary Assessment/Site Investigation Report
Anschutz Mining Corporation
Fredericktown, Missouri
February 25, 1986

LABORATORY SERVICES PROGRAM
RESULT OF SAMPLE ANALYSIS

Sample No. 86-2028

Reported to: SAM BRENNEKE
Affiliation: EER

Date: 6/11/86
Project Code: 3535/3000

Sample Description:
ANSCHUTZ MINING CO.
GRAB SAMPLE FROM BLACK POND #1, WATER SAMPLE

Collected by: SAM BRENNEKE
Affiliation: EER

Date: 02/25/86

PARAMETERS	RESULTS
TOTAL SILVER	40 UG/L
TOTAL ARSENIC	NO RESULT
COMMENTS : MATRIX INTERFERENCE	
TOTAL BARIUM	<100 UG/L
COMMENTS : INTERFERENCE	
CYANIDE	<0.05 MG/L
TOTAL CADMIUM	280 UG/L

PARAMETERS	RESULTS
TOTAL CHROMIUM	270 UG/L
TOTAL MERCURY	<0.5 UG/L
TOTAL LEAD	1300 UG/L
TOTAL SELENIUM	NO RESULT
COMMENTS : MATRIX INTERFERENCE	
PCB-1016	< 1.0 ug/Kg
PCB-1221	< 1.0 ug/Kg
PCB-1232	< 1.0 ug/Kg
PCB-1242	< 1.0 ug/Kg
PCB-1248	< 1.0 ug/Kg
PCB-1254	< 1.0 ug/Kg
PCB-1260	< 1.0 ug/Kg

LABORATORY SERVICES PROGRAM
RESULT OF SAMPLE ANALYSIS

Sample No. 86-2029

Reported to: SAM BRENNEKE
Affiliation: EER

Date: 6/03/86
Project Code: 3535/3000

Sample Description:
ANSCHUTZ MINING CO.
GRAB SAMPLE FROM BLACK POND #1, SEDIMENT SAMPLE

Collected by: SAM BRENNEKE
Affiliation: EER

Date: 02/25/86

PARAMETERS	RESULTS
TEP SILVER	<2500 UG/L
TEP ARSENIC	<2500 UG/L
TEP BARIUM	<10000 UG/L
CYANIDE	<0.01 MG/L
COMMENTS : ANALYZED BY WILSON LABORATORIES	
TEP CADMIUM	<500 UG/L
TEP CHROMIUM	<2500 UG/L

PARAMETERS	RESULTS
TEP MERCURY	<100 UG/L
TEP LEAD	<2500 UG/L
TEP SELENIUM	<2500 UG/L
PCB-1016	< 1.0 ug/Kg
PCB-1221	< 1.0 ug/Kg
PCB-1232	< 1.0 ug/Kg
PCB-1242	< 1.0 ug/Kg
PCB-1248	< 1.0 ug/Kg
PCB-1254	< 1.0 ug/Kg
PCB-1260	< 1.0 ug/Kg

LABORATORY SERVICES PROGRAM
RESULT OF SAMPLE ANALYSIS

Sample No. 86-2030

Reported to: SAM BRENNEKE
Affiliation: EER

Date: 6/04/86
Project Code: 3535/3000

Sample Description:
ANSCHUTZ MINING CO.
GRAB SAMPLE FROM BLACK POND #2, WATER SAMPLE

Collected by: SAM BRENNEKE
Affiliation: EER

Date: 02/25/86

PARAMETERS	RESULTS
TOTAL SILVER	60 UG/L
TOTAL ARSENIC	1800 UG/L
TOTAL BARIUM COMMENTS : INTERFERENCE	<100 UG/L
CYANIDE	<0.05 MG/L
TOTAL CADMIUM	320 UG/L
TOTAL CHROMIUM	330 UG/L

Sample no. 86-2030
Date 6/04/86

PARAMETERS	RESULTS
TOTAL MERCURY	<0.5 UG/L
TOTAL LEAD	1400 UG/L
TOTAL SELENIUM	NO RESULT
COMMENTS : MATRIX INTERFERENCE	
PCB-1016	< 1.0 ug/Kg
PCB-1221	< 1.0 ug/Kg
PCB-1232	< 1.0 ug/Kg
PCB-1242	< 1.0 ug/Kg
PCB-1248	< 1.0 ug/Kg
PCB-1254	< 1.0 ug/Kg
PCB-1260	

LABORATORY SERVICES PROGRAM
RESULT OF SAMPLE ANALYSIS

Sample No. 86-2031

Reported to: SAM BRENNEKE
Affiliation: EER

Date: 6/03/86
Project Code: 3535/3000

Sample Description:
ANSCHUTZ MINING CO.
GRAB SAMPLE FROM BLACK POND #2, SEDIMENT SAMPLE

Collected by: SAM BRENNEKE
Affiliation: EER

Date: 02/25/86

PARAMETERS	RESULTS
TEP SILVER	<2500 UG/L
TEP ARSENIC	<2500 UG/L
TEP BARIUM	<10000 UG/L
CYANIDE	0.01 MG/L
COMMENTS : ANALYZED BY WILSON LABORATORIES	
TEP CADMIUM	<500 UG/L
TEP CHROMIUM	<2500 UG/L

PARAMETERS	RESULTS
TEP MERCURY	<100 UG/L
TEP LEAD	<2500 UG/L
TEP SELENIUM	<2500 UG/L
PCB-1016	< 1.0 ug/Kg
PCB-1221	< 1.0 ug/Kg
PCB-1232	< 1.0 ug/Kg
PCB-1242	< 1.0 ug/Kg
PCB-1248	< 1.0 ug/Kg
PCB-1254	< 1.0 ug/Kg
PCB-1260	< 1.0 ug/Kg

LABORATORY SERVICES PROGRAM
RESULT OF SAMPLE ANALYSIS

Sample No. 86-2032

Reported to: SAM BRENNEKE
Affiliation: EER

Date: 4/08/86
Project Code: 3535/3000

Sample Description:
ANSCHUTZ MINING CO.
SOIL SAMPLE FROM PROCESS AREA CENTER OF SITE

Collected by: SAM BRENNEKE
Affiliation: EER

Date: 02/25/86

PARAMETERS	RESULTS
TEP CADMIUM	<500 UG/L
CYANIDE	<0.01 MG/L
COMMENTS : ANALYZED BY WILSON LABORATORIES	
TEP SILVER	<2500 UG/L
TEP ARSENIC	<2500 UG/L
TEP CHROMIUM	<2500 UG/L
TEP LEAD	5800 UG/L
TEP BARIUM	<10000 UG/L
TEP MERCURY	<100 UG/L
TEP SELENIUM	<2500 UG/L

LABORATORY SERVICES PROGRAM
RESULT OF SAMPLE ANALYSIS

Sample No. 86-2033

Reported to: SAM BRENNEKE
Affiliation: EER

Date: 7/17/86
Project Code: 3535/3000

Sample Description:
ANSCHUTZ MINING CO.
SOIL SAMPLE FROM DRAINAGE BELOW MINING CO.

Collected by: SAM BRENNEKE
Affiliation: EER

Date: 02/25/86

PARAMETERS	RESULTS
TEP SILVER	<2500 UG/L
TEP ARSENIC	<2500 UG/L
TEP BARIUM	<10000 UG/L
CYANIDE	0.04 MG/L
COMMENTS : ANALYZED BY WILSON LABORATORIES	
TEP CADMIUM	<500 UG/L
TEP CHROMIUM	<2500 UG/L

PARAMETERS	RESULTS
TEP MERCURY	<100 UG/L
TEP LEAD	28000 UG/L
TEP SELENIUM	<2500 UG/L
PCB-1016	< 1.0 ug/Kg
PCB-1221	< 1.0 ug/Kg
PCB-1232	< 1.0 ug/Kg
PCB-1242	< 1.0 ug/Kg
PCB-1248	< 1.0 ug/Kg
PCB-1254	240 ug/Kg
PCB-1260	< 1.0 ug/Kg

LABORATORY SERVICES PROGRAM
RESULT OF SAMPLE ANALYSIS

Sample No. 86-2034

Reported to: SAM BRENNEKE
Affiliation: EER

Date: 6/03/86
Project Code: 3535/3000

Sample Description:
ANSCHUTZ MINING CO.
BACKGROUND SOIL

Collected by: SAM BRENNEKE
Affiliation: EER

Date: 02/25/86

PARAMETERS	RESULTS
TEP SILVER	<2500 UG/L
TEP ARSENIC	<2500 UG/L
TEP BARIUM	<10000 UG/L
CYANIDE	0.10 MG/L
COMMENTS : ANALYZED BY WILSON LABORATORIES	
TEP CADMIUM	<500 UG/L
TEP CHROMIUM	<2500 UG/L

PARAMETERS	RESULTS
TEP MERCURY	<100 UG/L
TEP LEAD	<2500 UG/L
TEP SELENIUM	<2500 UG/L
PCB-1016	< 1.0 ug/Kg
PCB-1221	< 1.0 ug/Kg
PCB-1232	< 1.0 ug/Kg
PCB-1242	< 1.0 ug/Kg
PCB-1248	< 1.0 ug/Kg
PCB-1254	< 1.0 ug/Kg
PCB-1260	< 1.0 ug/Kg

LABORATORY SERVICES PROGRAM
RESULT OF SAMPLE ANALYSIS

Sample No. 86-2035

Reported to: SAM BRENNEKE
Affiliation: EER

Date: 7/17/86
Project Code: 3535/3000

Sample Description:
ANSCHUTZ MINING CO.
WATER SAMPLE FROM DRAINAGE OFF SITE

Collected by: SAM BRENNEKE
Affiliation: EER

Date: 02/25/86

PARAMETERS	RESULTS
TOTAL SILVER	10 UG/L
TOTAL ARSENIC	19 UG/L
TOTAL BARIUM	<100 UG/L
CYANIDE	<0.05 MG/L
TOTAL CADMIUM	10 UG/L
TOTAL CHROMIUM	<5UG/L

PARAMETERS	RESULTS
TOTAL MERCURY	<0.5 UG/L
TOTAL LEAD	140 UG/L
TOTAL SELENIUM	<5UG/L
PCB-1016	< 1.0 ug/L
PCB-1221	< 1.0 ug/L
PCB-1232	< 1.0 ug/L
PCB-1242	< 1.0 ug/L
PCB-1248	< 1.0 ug/L
PCB-1254	< 1.0 ug/L
PCB-1260	< 1.0 ug/L